

REPLACEMENT SHEET

Title: A FEED FORWARD CLOCK AND DATA RECOVERY UNIT

Applicant: Peter Gregorius

Serial No.: 10/810,981

Atty Docket: 1406/145/2

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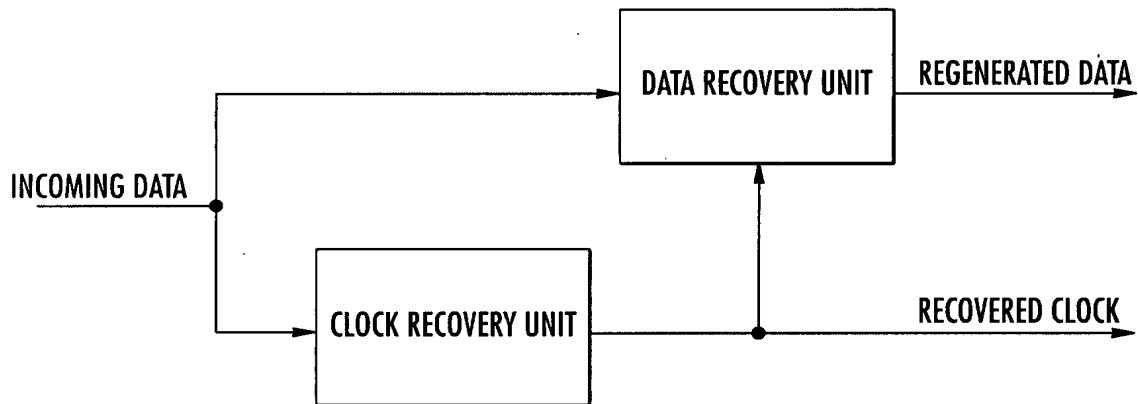


FIG. 1
(PRIOR ART)

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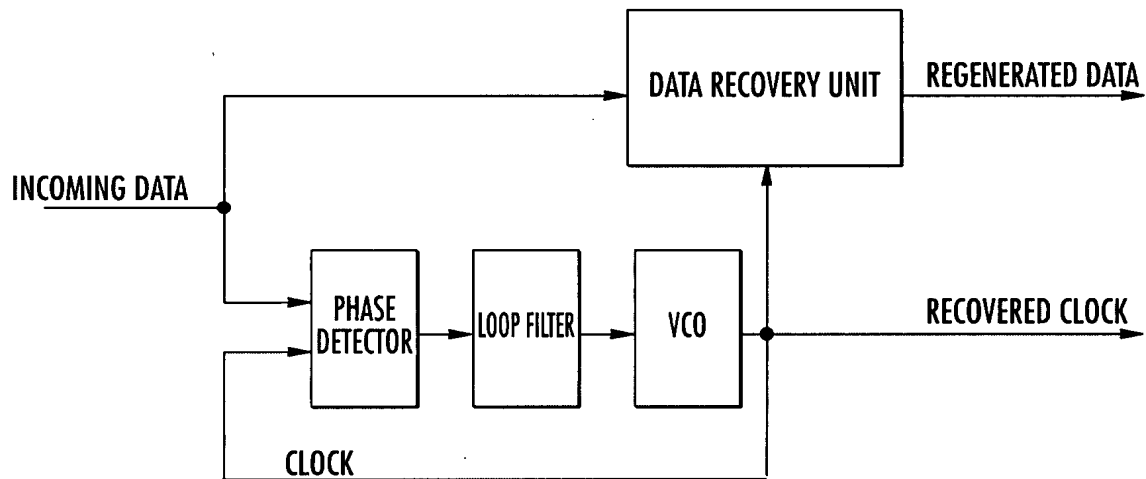


FIG. 2
(PRIOR ART)

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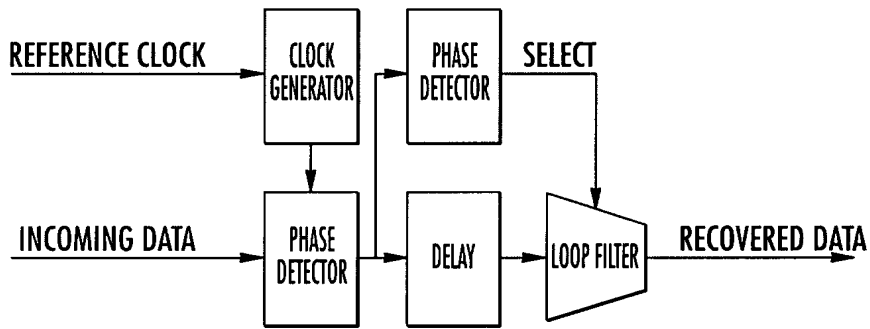


FIG. 3a

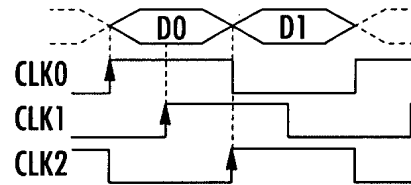


FIG. 3b

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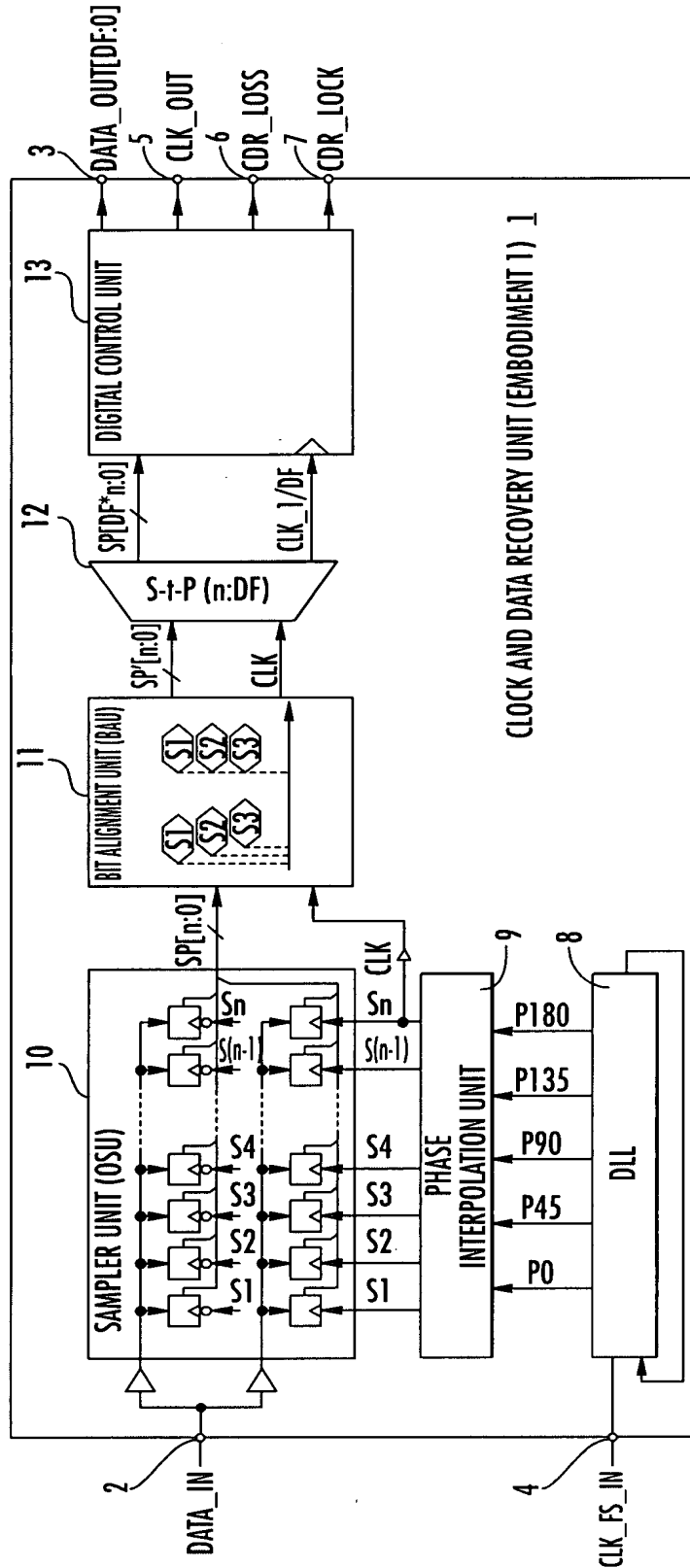


FIG. 4

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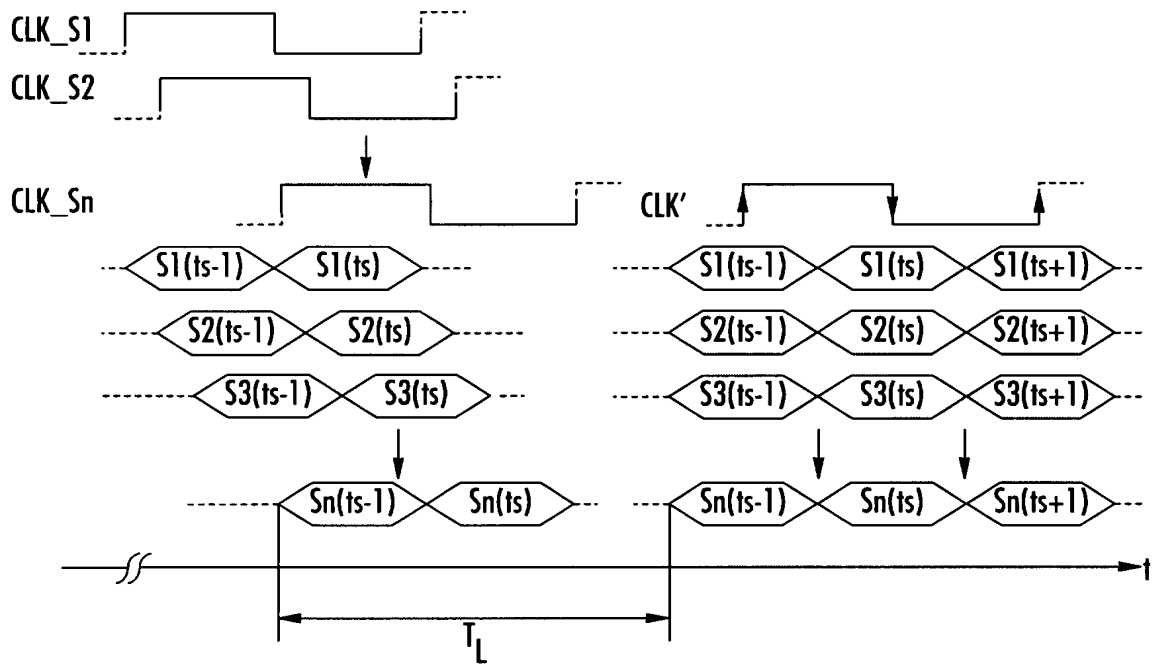


FIG. 5

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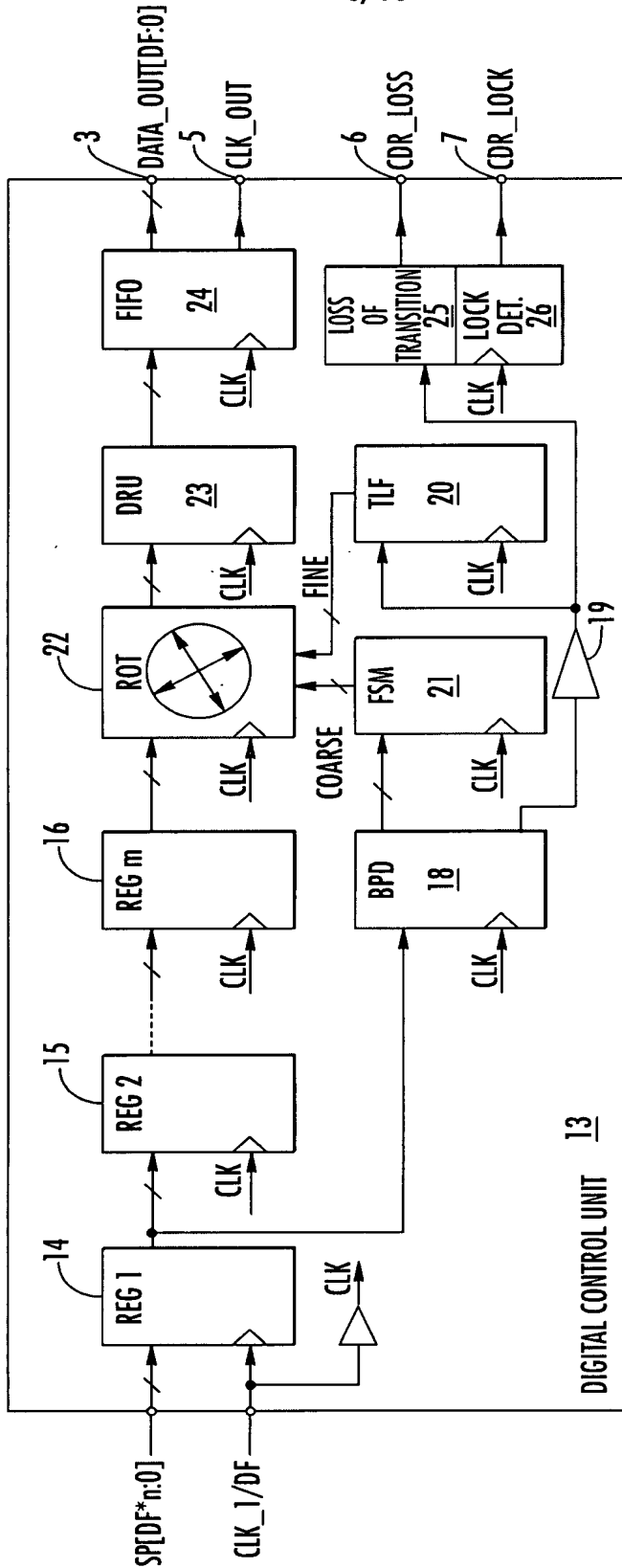


FIG. 6

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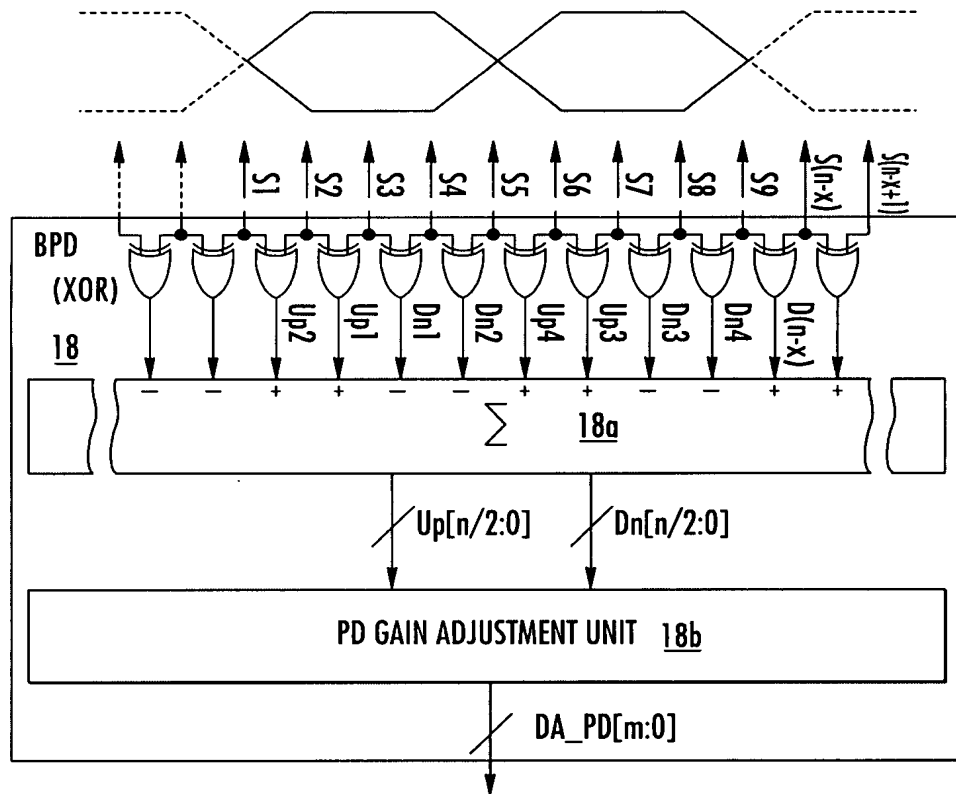


FIG. 7a

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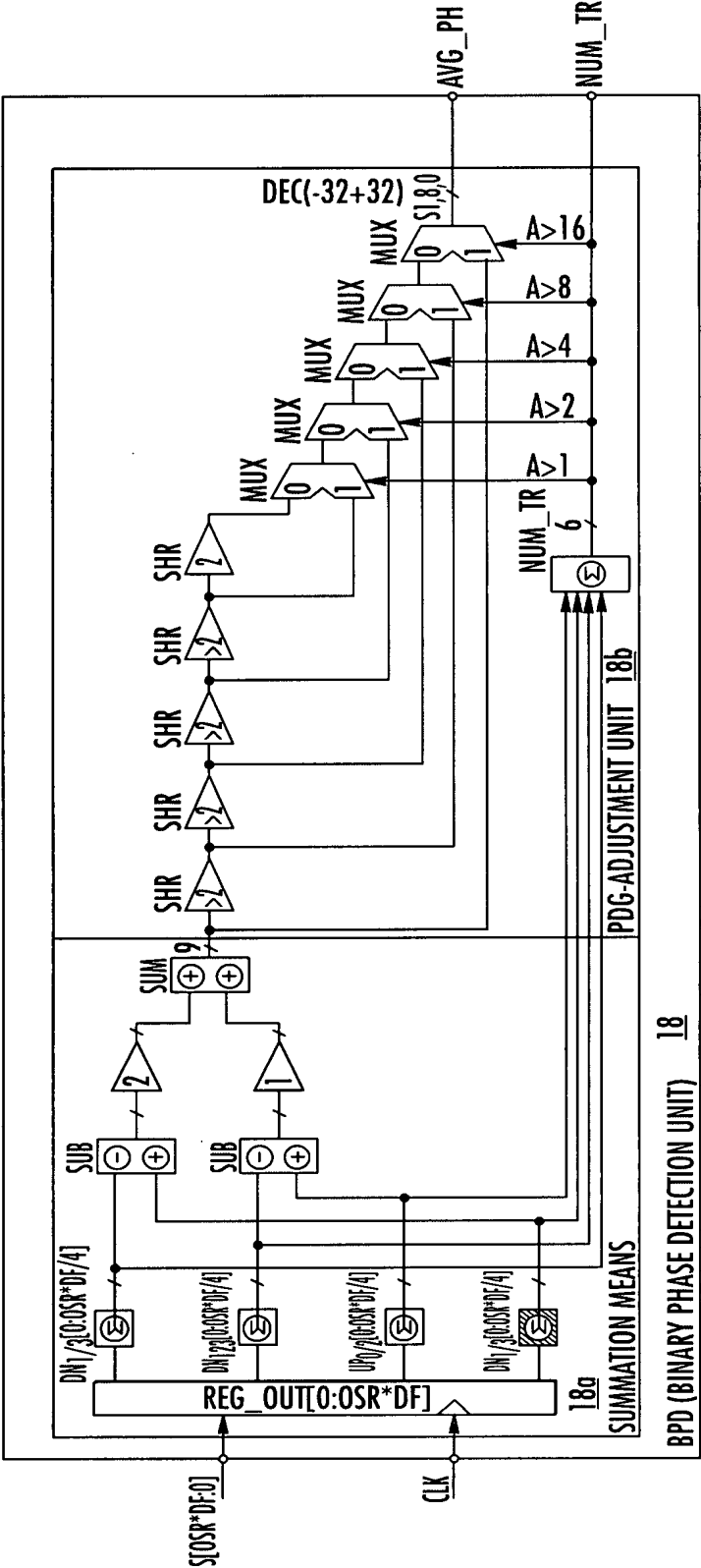


FIG. 7b

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PHASE DETECTOR GAIN
GPD

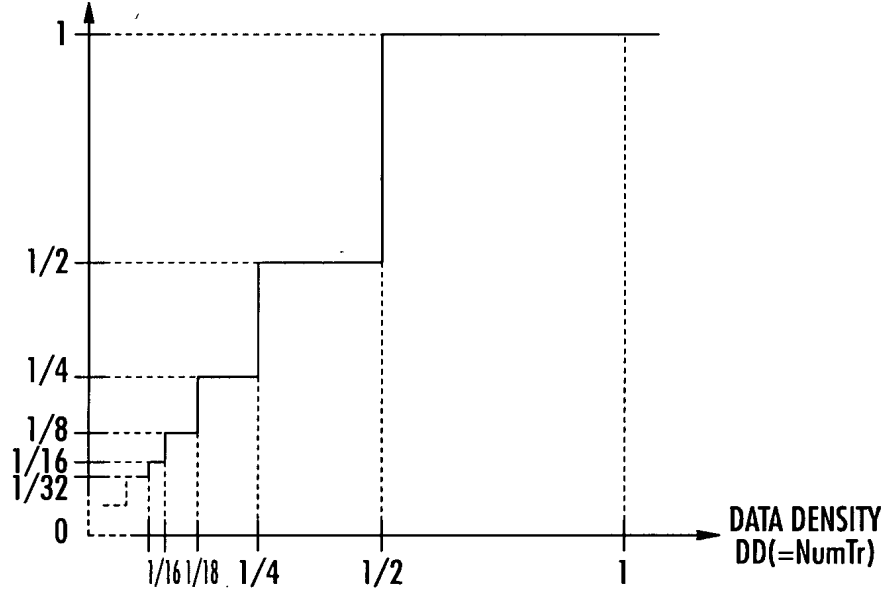


FIG. 8a
(PRIOR ART)

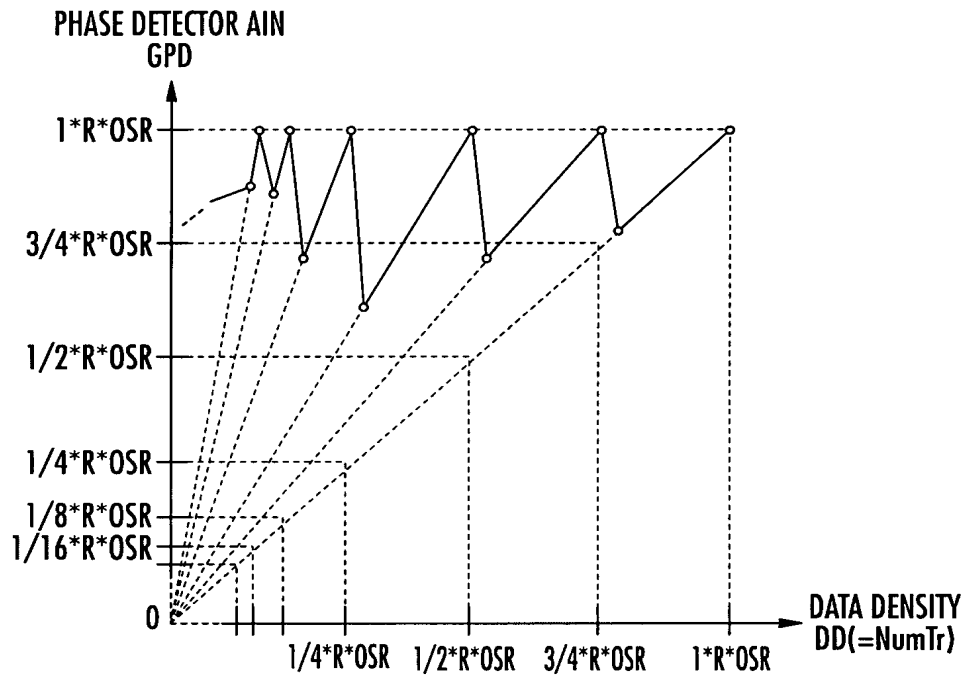


FIG. 8b

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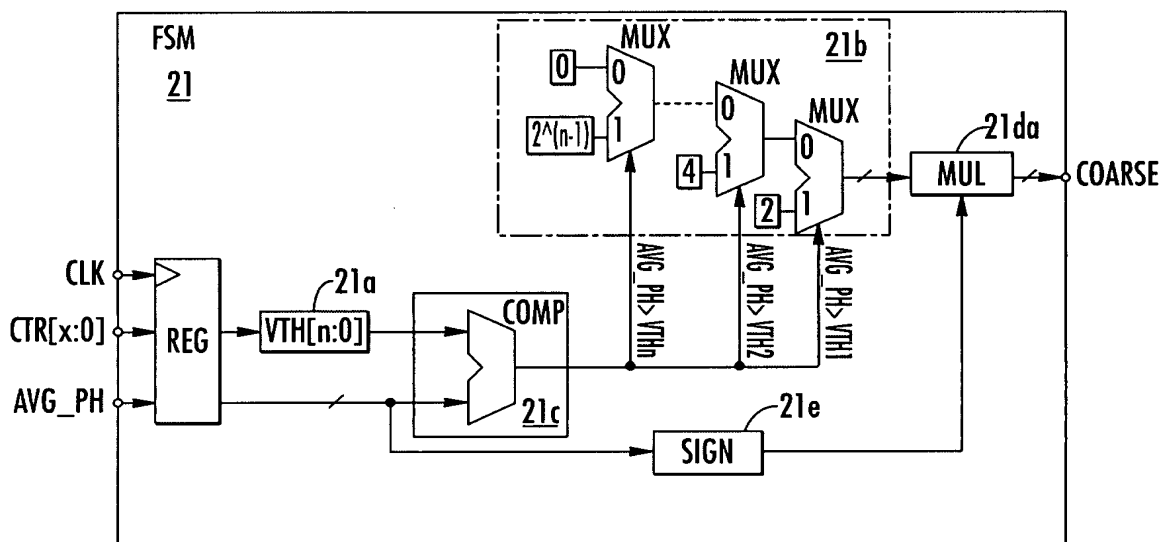


FIG. 9

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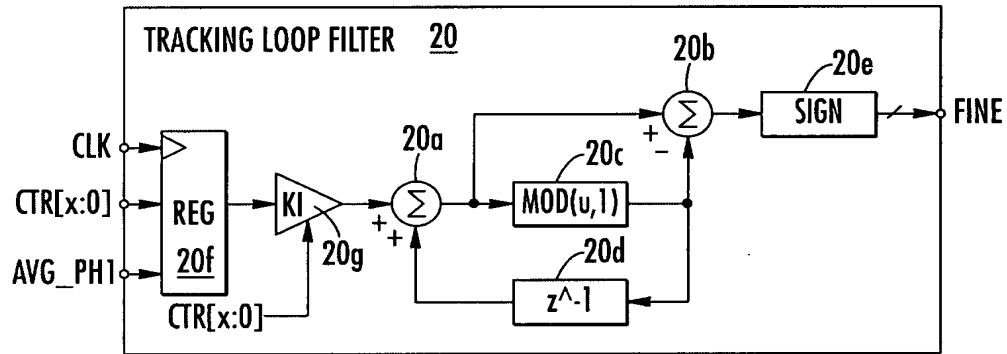


FIG. 10

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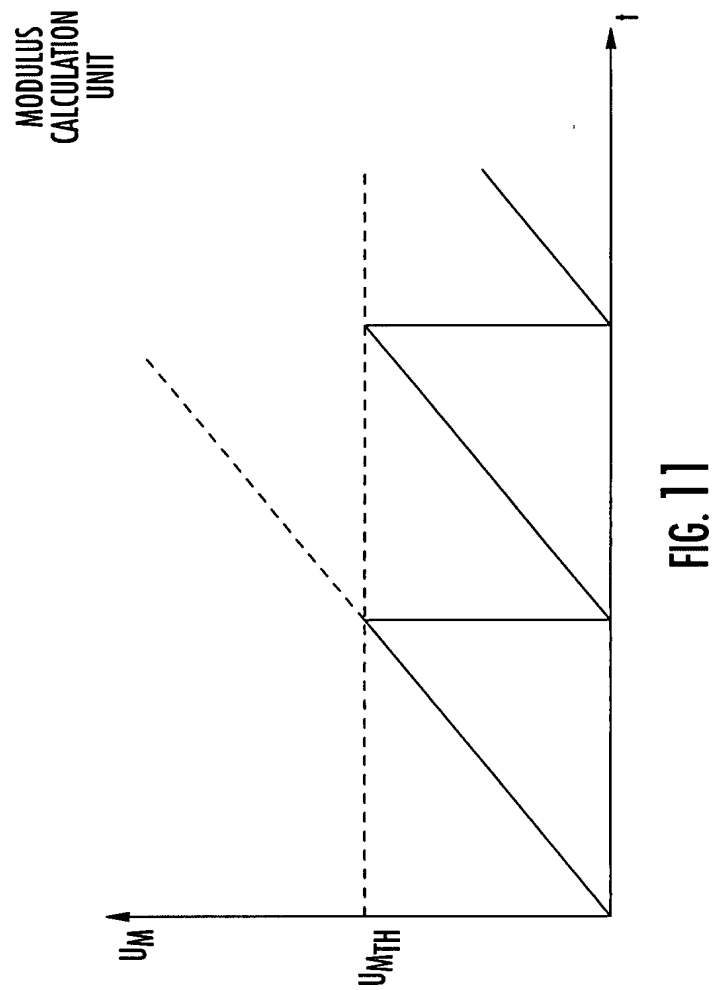
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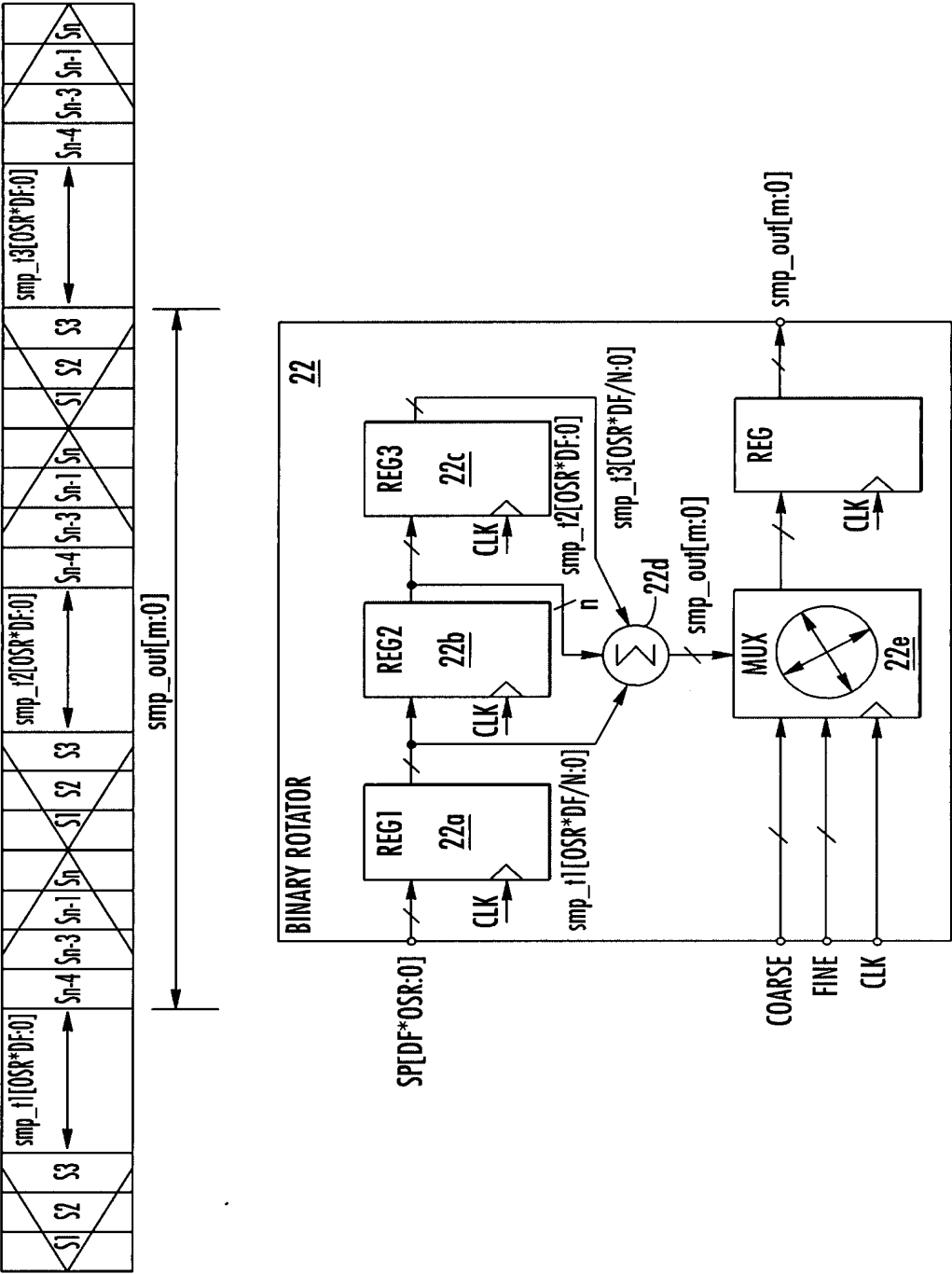


FIG. 12

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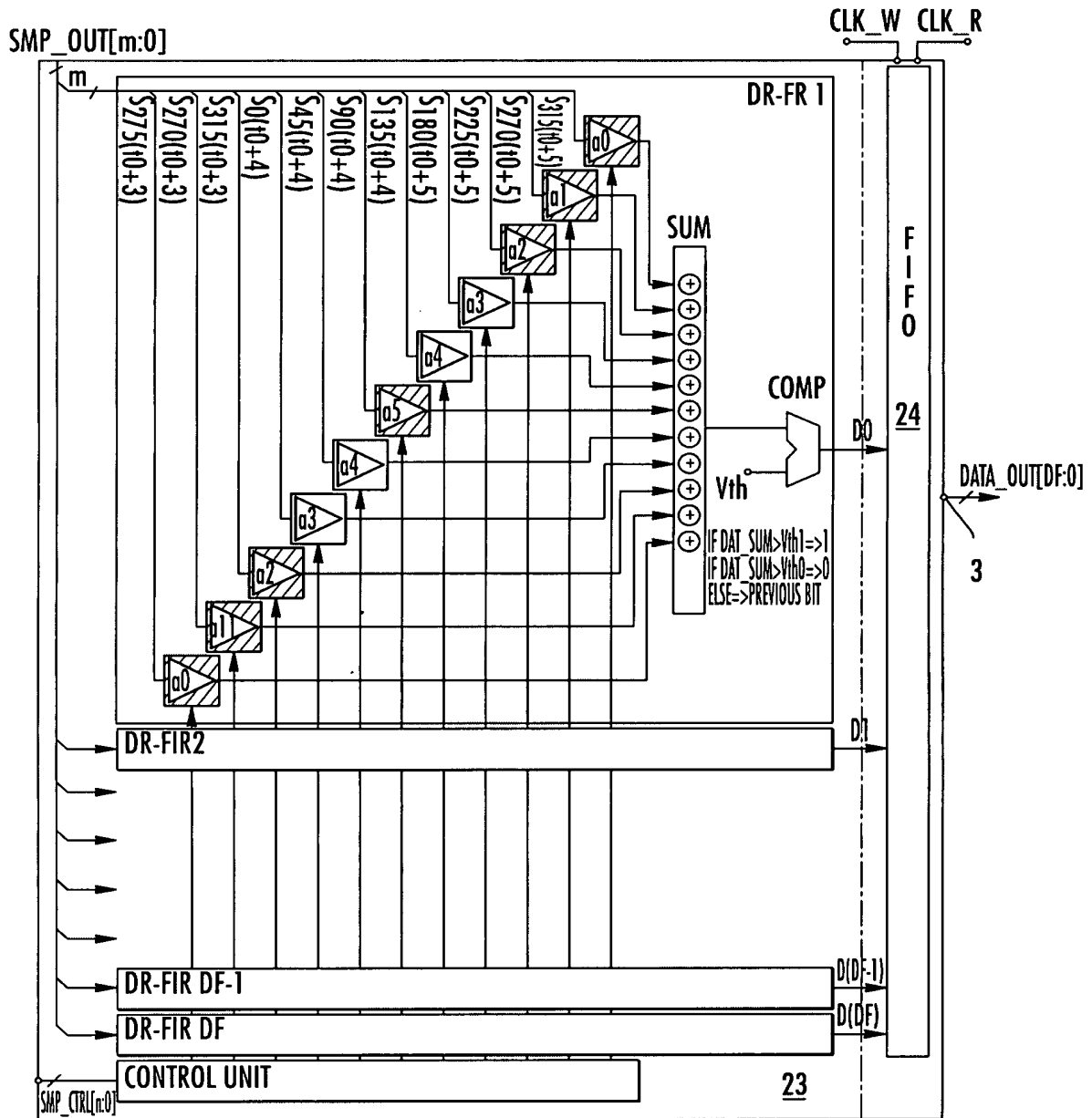


FIG. 13

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FIG. 14

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$$H_{FIR}(z) = a_0 + a_1 \cdot z^{-1} + a_2 \cdot z^{-2} + a_3 \cdot z^{-3} + a_4 \cdot z^{-4} + a_5 \cdot z^{-5} \dots$$

$$g(t) = K \cdot \frac{\sin \omega_K(t-t_0)}{\pi(t-t_0)}$$

$$K=10$$

$$P_e = g(t-t_0) \cdot s_k$$

$$K=1$$

TRANSFER FUNCTION

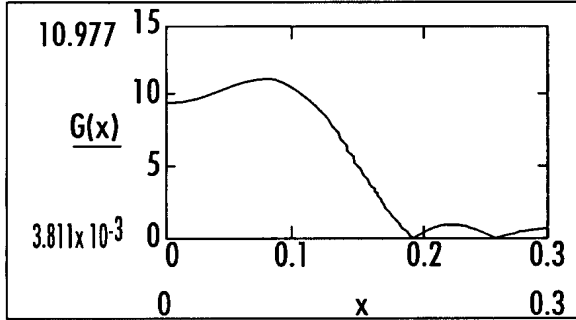


FIG. 15a

IMPULSE RESPONSE

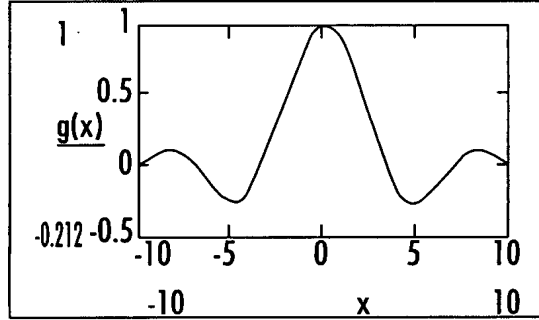


FIG. 15b

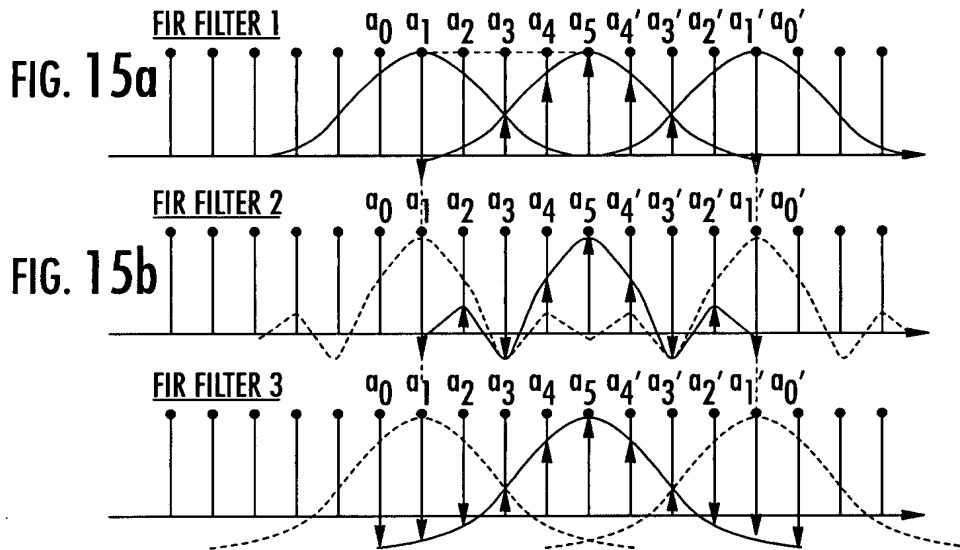


FIG. 15c

FIG. 15

FILTER COEFFICIENTS			
	FILTER A	FILTER B	FILTER C
a_0	0	0	-18
a_1	-1	-6	-14
a_2	0	8	-8
a_3	20	-13	17
a_4	50	40	50
a_5	64	64	64
a_4'	50	40	50
a_3'	20	-13	19
a_2'	0	8	-6
a_1'	-1	-6	-14
a_0'	0	0	-18

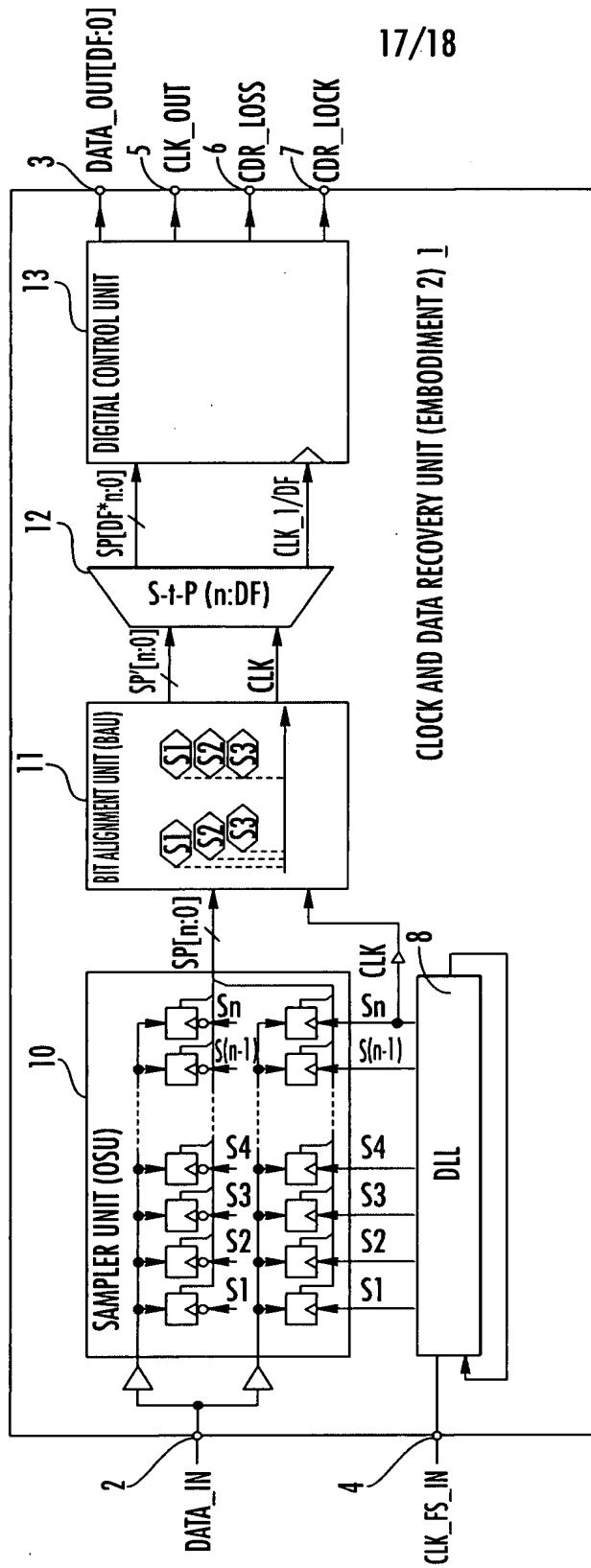


FIG. 16

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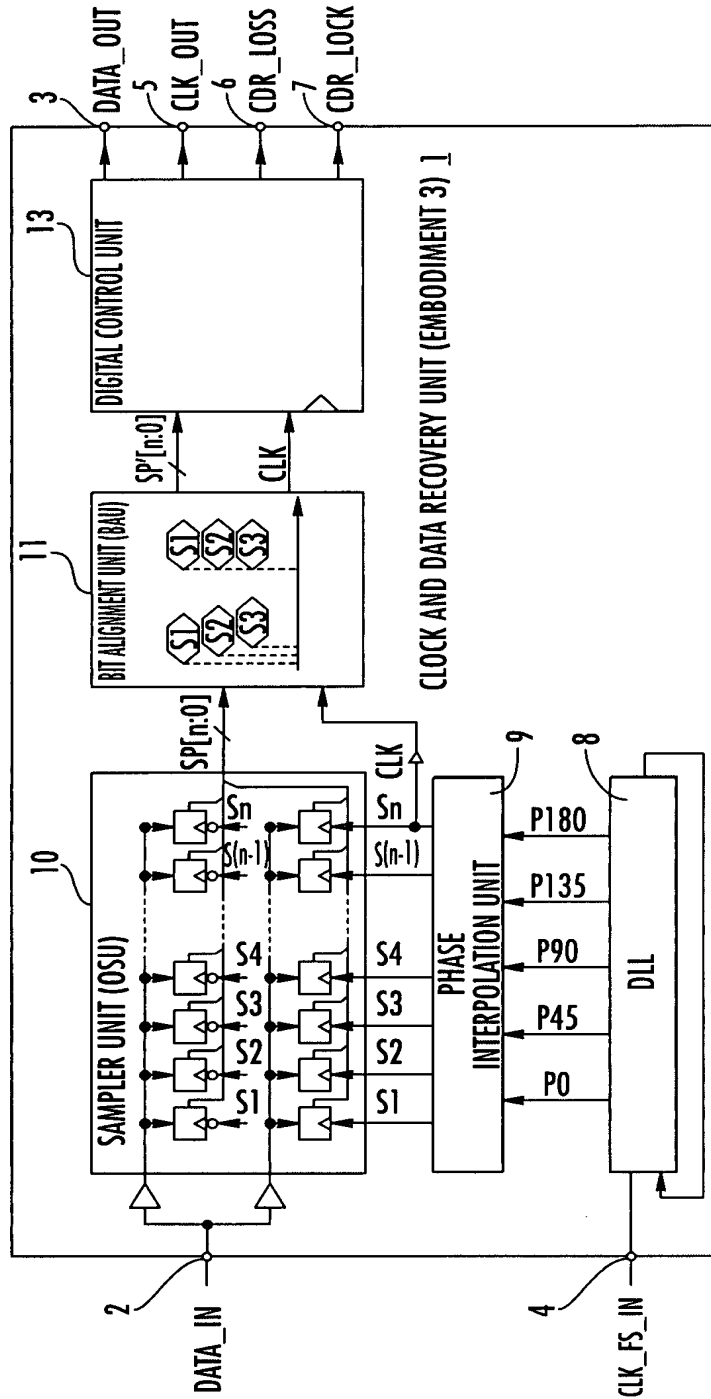


FIG. 17